

## **T-08 (Segments 1 & 2) – “Gulf Sturgeon Winter Habitat Study”**

*Abstract:* Features of Gulf Sturgeon (*Acipenser oxyrinchus desotoi*) winter habitat were sought in the Chandeleur and Breton Sound areas in southeastern Louisiana from July 2002 through November 2004. Tissue samples were collected for population, age structure, and genetic assessments. Adult Gulf Sturgeons were captured on summer resting habitats in the Bogue Chitto River and tagged and fitted with external or internal sonic transmitters. Seasonal migration and habitat usage patterns were documented. Wintering Gulf Sturgeons were located along Mississippi's Barrier Islands. Attempts to locate wintering Gulf Sturgeons along Louisiana's barrier islands was initially hampered by boating safety concerns, then by severe weather. No tagged Gulf Sturgeons were re-captured along Louisiana's barrier islands. Thirty-eight (38) externally attached sonic transmitters were confirmed to have been lost after tagged sturgeons were re-captured without transmitters. Transmitter loss reduced the efficacy of locating spawning areas. PIT tags were found to be the most reliable. Gulf Sturgeons appear to be spatially separated by age during the summer, but the reason for this separation remains unclear. Further investigation of the lower reaches of the Bogue Chitto River as spawning habitat is recommended. In 2003, a Gulf Sturgeon was captured in the Amite River, west of the currently designated Critical Habitat. Rivers of the Pontchartrain Basin located west of the designated Critical Habitat should be investigated to determine if they should be included as Critical Habitat.

This grant was closed 30 June 2005. **For more information** about State Wildlife Grant T-8, or to obtain copies of interim or final reports, please contact the State Wildlife Grant Coordinator, LDWF Fur & Refuge Division.